

Back End Interconnect With a Shaped Interface

Abstract

An interconnect structure in the back end of the line of an integrated circuit forms contacts between successive layers by removing material in the top surface of the lower interconnect in a cone-shaped aperture, the removal process extending through the liner of the upper aperture, and depositing a second liner extending down into the cone-shaped aperture, thereby increasing the mechanical strength of the contact, which then enhance the overall reliability of the integrated circuit.